DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES Office of Structural Materials

Quality Assurance and Source Inspection

Bay Area Branch 690 Walnut Ave.St. 150 Vallejo, CA 94592-1133 (707) 649-5453 (707) 649-5493



Contract #: 04-0120F4

Cty: SF/ALA Rte: 80 PM: 13.2/13.9

69.28 File #:

WELDING INSPECTION REPORT

Resident Engineer: Pursell, Gary **Report No:** WIR-015534 Address: 333 Burma Road **Date Inspected:** 05-Jul-2010

City: Oakland, CA 94607

OSM Arrival Time: 700 **Project Name:** SAS Superstructure **OSM Departure Time:** 1900 **Prime Contractor:** American Bridge/Fluor Enterprises, a JV

Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island Contractor: **Location:** Shanghai, China

CWI Name: Mr. Gao Zhi Chun **CWI Present:** Yes No **Inspected CWI report:** Yes N/A **Rod Oven in Use:** Yes No No N/A N/A **Electrode to specification:** Yes No **Weld Procedures Followed:** Yes No N/A N/A **Qualified Welders:** Yes No **Verified Joint Fit-up:** Yes No N/A N/A Yes No N/A **Approved Drawings:** Yes No **Approved WPS:** Yes No N/A **Delayed / Cancelled:**

34-0006 **Bridge No: Component:** Tower

Summary of Items Observed:

On this day CALTRANS OSM Quality Assurance (QA) Inspector Shailesh Gaikwad was present during the times noted above for observations relative to the fabrication of the SAS Superstructure being performed by Zhenhua Port Machinery Company (ZPMC) at Changxing Island in Shanghai, China. QA observed and/or found the following:

BAY 12

This QA Inspector performed randomly Visual Inspection and Magnetic Particle Testing (MT) of approximately 15% of the area previously tested and accepted by ZPMC Quality Control personnel. This QA Inspector generated a TL- 6028 (MT) report for this date. The member is identified as Tower Façade pad eye. The weld designations reviewed are as follows.

SL3-77M-1, 6, 15, 21

NDT Notification No-06129

BAY 12

This QA Inspector performed randomly Visual Inspection and Magnetic Particle Testing (MT) of approximately 15% of the area previously tested and accepted by ZPMC Quality Control personnel. This QA Inspector generated a TL- 6028 (MT) report for this date. The member is identified as Tower Façade pad eye. The weld designations reviewed are as follows.

SD1-A499-3, 4

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NDT Notification No-06131

This QA Inspector observed the following work in progress:

BAY 11: SMAW Process.

This QA Inspector observed ZPMC qualified welding personnel identified as 044551, Perform Shielded Metal Arc Welding (SMAW) on Tower strut. Joint identified as WD1-STSA4-5-123M-1-33, 34, 11, 12, ZPMC CWI Identified as Yu Dong Ping, The welding parameters as measured using QC's calibrated instrument appeared to be in general compliance with WPS-B-T-2112.

This QA Inspector observed ZPMC qualified welding personnel identified as 040656, 046769 Perform Shielded Metal Arc Welding (SMAW) on Tower strut. Joint identified as SD1-STSA4-5-135M-1-41, 42, 17, 18, 29, 30, 39, 40, ZPMC CWI Identified as Yu Dong Ping, The welding parameters as measured using QC's calibrated instrument appeared to be in general compliance with WPS-B-T-2112.

This QA Inspector observed ZPMC qualified welding personnel identified as 040655, 054460 Perform Shielded Metal Arc Welding (SMAW) on Tower strut. Joint identified as WD1-STSA4-5-139M-1-19, 20, 39, 40, 29, 30, 41, 42, 17, 18, ZPMC CWI Identified as Yu Dong Ping, The welding parameters as measured using QC's calibrated instrument appeared to be in general compliance with WPS-B-T-2112.

This QA Inspector observed ZPMC qualified welding personnel identified as 040690, 044541 Perform Shielded Metal Arc Welding (SMAW) on Tower strut. Joint identified as SD1-STSA4-5-127M-1-28, 32, ZPMC CWI Identified as Yu Dong Ping, The welding parameters as measured using QC's calibrated instrument appeared to be in general compliance with WPS-B-T-4113-1.

This QA Inspector observed ZPMC qualified welding personnel identified as 041271, 251194 Perform Shielded Metal Arc Welding (SMAW) on Tower strut. Joint identified as WD1-STSA4-5-127M-1-13, 14, 15, 16, ZPMC CWI Identified as Yu Dong Ping, The welding parameters as measured using QC's calibrated instrument appeared to be in general compliance with WPS-B-T-2113.

This QA Inspector observed ZPMC qualified welding personnel identified as 046709, Perform Shielded Metal Arc Welding (SMAW) on Interior splice plate. Joint identified as ESD1-SPSA5-7-2A. ZPMC QC Identified as Shao Hai Long, The welding parameters as measured using QC's calibrated instrument appeared to be in general compliance with WPS-B-T-3211-Tc-U5b-1.

This QA Inspector observed ZPMC qualified welding personnel identified as 046704, Perform Shielded Metal Arc Welding (SMAW) on Interior splice plate. Joint identified as WSD1-SPSA5-12-2A. ZPMC QC Identified as Shao Hai Long, The welding parameters as measured using QC's calibrated instrument appeared to be in general compliance with WPS-B-T-3211-Tc-U5b-1.

This QA Inspector observed ZPMC qualified welding personnel identified as 040667, Perform Shielded Metal Arc Welding (SMAW) on Interior splice plate. Joint identified as WSD1-SPSA5-20-2B. ZPMC QC Identified as Shao Hai Long, The welding parameters as measured using QC's calibrated instrument appeared to be in general compliance with WPS-B-T-3211-Tc-U5b-1.

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This QA Inspector observed ZPMC qualified welding personnel identified as 040614, Perform Shielded Metal Arc Welding (SMAW) on Interior splice plate. Joint identified as ESD1-SPSA5-12-2A. ZPMC QC Identified as Shao Hai Long, The welding parameters as measured using QC's calibrated instrument appeared to be in general compliance with WPS-B-T-3211-Tc-U5b-1.

Magnetic Particle Testing:

This QA Inspector observed ZPMC Magnetic Particle Testing Inspector, performing MT on Tower strut weld. Strut identified as ED1-STSA4-6-139M-2.

BAY 10: SMAW Process:

This QA Inspector observed ZPMC qualified welding personnel identified as 050289, Perform Shielded Metal Arc Welding (SMAW) on Interior splice plate. Joint identified as NSD1-SPSA5-13-4B, ZPMC QC Identified as Yuan Hai Gang, The welding parameters as measured using QC's calibrated instrument appeared to be in general compliance with WPS-B-T-3211-Tc-U5b-1.

This QA Inspector observed ZPMC qualified welding personnel identified as 052493, Perform Shielded Metal Arc Welding (SMAW) on Interior splice plate. Joint identified as SSD1-SPSA5-13-4B, ZPMC QC Identified as Yuan Hai Gang, The welding parameters as measured using QC's calibrated instrument appeared to be in general compliance with WPS-B-T-3211-Tc-U5b-1.

This QA Inspector observed ZPMC qualified welding personnel identified as 040268, Perform Shielded Metal Arc Welding (SMAW) on North Tower lift 4 Cable Tray. Joint identified as B22-4-EL139.768M-1,2-(1, 2)-N and B22-4-EL142.100M-1, 2-(1,2)-N, ZPMC QC Identified as Lu Wei Chao, The welding parameters as measured using QC's calibrated instrument appeared to be in general compliance with WPS-B-P-2113. For more information see below attached picture number 1.

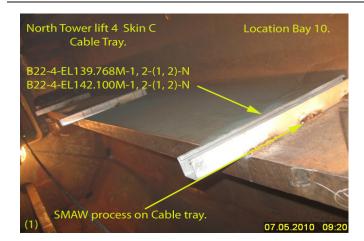
BAY 11 OBG Side plate:

This QA Inspector observed ZPMC qualified welding personnel identified as 202314, Perform Shielded Metal Arc Welding (SMAW) on Side plate of OBG lift 13 east line A segment fit up, tack welding on side plate. Joint identified as SP3070-1~8, ZPMC QC Identified as Libin. The welding parameters as measured using QC's calibrated instrument appeared to be in general compliance with WPS-B-P-2112 FCM. For more information see below attached picture number 2.

Unless otherwise noted, all work observed on this date appeared to be in general compliance with the applicable contract documents.

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Summary of Conversations:

Only general conversation was held between QA and QC concerning this project.

Comments

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Michael Ng Phone: 15921845703, who represents the Office of Structural Materials for your project.

| Inspected By: | Gaikwad,Shailesh | Quality Assurance Inspector |
|---------------|------------------|-----------------------------|
| Reviewed By: | Clifford,William | QA Reviewer |